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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,034	01/16/2002	Todd Sarnstrom	6740-520	1251

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EXAMINER

HINZE, LEO T

ART UNIT	PAPER NUMBER
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2854

DATE MAILED: 09/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/052,034

Applicant(s)

SARNSTROM, TODD

Examiner

Leo T. Hinze

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/16/02 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: _____

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DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: '50', as described on page 7, line 26, and '54' as described on page 10, line 31.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: '56' in Fig. 4.

A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities:

Page 7, line 26, it appears that "frame 50" does not contain the correct reference number.

Page 7, line 33, it appears that "vertical mount 90" should be "vertical mount 80".

Appropriate correction is required.

Claim Objections

4. Claim 24 is objected to because of the following informalities: the claim contains a period after the word "chase" in line 5.

Appropriate correction is required.

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Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 6, 7, 8, and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "coarse" in claims 6 and 7 is a relative term which renders the claim indefinite. The term "coarse" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The limitations "horizontal adjustment" and "vertical adjustment" in the claim have been rendered indefinite by the use of the term. Examination will proceed with the limitations "horizontal adjustment" and "vertical adjustment" not modified by "coarse."

The term "fine" in claims 8 and 9 is a relative term which renders the claim indefinite. The term "fine" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The limitations "horizontal adjustment" and "vertical adjustment" in the claim have been rendered indefinite by the use of the term. Examination will proceed with the limitations "horizontal adjustment" and "vertical adjustment" not modified by "fine."

Appropriate correction and/or clarification is required.

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Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 6, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Ginsberg, US 921,974.

Regarding claim 1, Ginsberg teaches an apparatus for adjusting a die (F, F1, F2, F3) of a printing press, comprising: a chase (A) defining a vertical axis and a horizontal axis; a die frame (B) slidably secured to the chase to allow the adjustment (page 3, lines 61-62) of the die frame in the vertical axis and the horizontal axis of the chase.

Regarding claims 6 and 8, Ginsberg also teaches a vertical adjustment (page 2, lines 60-62).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-5, 7, 9, 10, 12, 17, 18, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bolles, US 1,144,458 in view of Gibbs, US 5,000,554.

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Bolles teaches:

- an apparatus for adjusting a die of a printing press, comprising: a chase (1, 2, 3, 4) defining a vertical axis and a horizontal axis; a die frame (6, 7, 8, 11) slidably secured to the chase to allow the adjustment of the die frame in the vertical axis of the chase (page 2, lines 56-58) (claim 1);
- at least one vertical guide (5, 9) secured in the chase, the at least one vertical guide connected to the die frame to slidably secure the die frame to the chase and to permit the die frame to be slidably positioned along the at least one vertical guide (claim 2);
- chase comprising an upper horizontal member (3), a lower horizontal member (4), a left vertical member (1) secured to the upper horizontal member and the lower horizontal member and a right vertical member (2) secured to the upper horizontal member and the lower horizontal member (claim 3);
- a vertical adjustment (claims 7 and 9);
- an apparatus for adjusting a die of a printing press, comprising: a chase including an upper horizontal member (3), a lower horizontal member (4), a left vertical member (1) and a right vertical member (2) and defining a vertical and a horizontal axis; at least one vertical guide (5, 9) secured between the upper horizontal member and the lower horizontal member; a die frame (6,7,8,11) slidably secured to the at least one vertical guide to permit movement of the die frame along the vertical axis (claim 23);
- a method for adjusting a die of a printing press, comprising: providing a die (“for type”, page 2, line 10); providing a die fixture including a chase (1, 2, 3, 4) defining a

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vertical and a horizontal axis, and a die frame (6, 7, 8, 11) slidably secured to the chase to allow the die frame to slide along the vertical axis; mounting the die in the die frame; mounting the die fixture in the printing press; and adjusting the position of the die by sliding the die along the vertical axis (claim 24);

- an apparatus for adjusting a die of a printing press, comprising: a chase (1, 2, 3, 4) defining a vertical and a horizontal axis; and a means (5, 9) for adjusting the die frame (6, 7, 8, 11) in the vertical axis, with the means for adjusting secured to the chase (claim 25).

Bolles does not teach:

- adjustment of the die frame in the horizontal axis of the chase (claim 1);
- at least one horizontal guide secured within the chase, the at least one horizontal guide slidably connected to the die frame to slidably secure the die frame to the chase and to permit the die frame to be slidably positioned along the at least one horizontal guide (claim 2);
- a vertical mount movably secured to the at least one vertical guide, with the die frame secured to the vertical slidable mount to slidably connect the die frame to the at least one vertical guide; a horizontal mount movably secured to the at least one horizontal guide and secured to a first end of the at least one vertical guide; and a second end of the at least one vertical guide slidably secured to one of the upper horizontal member and the lower horizontal member of the chase to permit the horizontal movement of the second end the at least one vertical guide along one of the upper horizontal member and the lower horizontal member (claim 4);

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- the second end of the at least one vertical guide secured to a sliding element to slidably secure the second end of the at least one vertical guide to one of the upper horizontal member and the lower horizontal member of the chase, the sliding element securedly attached to the second end of the at least one vertical guide and slidably attached to one of the upper horizontal member and the lower horizontal member (claim 5);
- a horizontal adjustment (claims 7 and 9);
- at least one of the vertical guides comprising a spirally threaded vertical guide (claim 10);
- the spirally threaded vertical guide received in a vertical bore of the vertical mount in a gearing relationship such that when the vertical spirally threaded rod is rotated the vertical mount moves along the vertical axis of the chase (claim 12);
- at least one of the at least one horizontal guides comprising a spirally threaded horizontal guide (claim 17);
- the spirally threaded horizontal guide received in a horizontal bore of the horizontal mount in a gearing relationship such that when the spirally threaded horizontal guide is rotated, the horizontal mount moves along the horizontal axis of the chase (claim 18);
- at least one horizontal guide secured between the left vertical member and the right vertical member; at least one vertical guide slidably secured to permit movement of the vertical guide along the horizontal axis (claim 23);

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- a die frame slidably secured to the chase to allow the die frame to slide along the horizontal axis of the chase; and adjusting the position of the die by sliding the die along the horizontal axis (claim 24);
- a means for adjusting the die frame in the horizontal axis (claim 25).

Gibbs teaches an apparatus for adjusting a frame (12) in two coordinates, including a vertical and horizontal axis, vertical (22, 48) and horizontal guides (30, 54), a frame for holding a working element, and:

- at least one horizontal guide secured to the base, the at least one horizontal guide slidably connected to the frame (12) to slidably secure the frame to a base and to permit the frame to be slidably positioned along the at least one horizontal guide (claim 2);
- a vertical mount (20) movably secured to the at least one vertical guide, with the frame (12) secured to the vertical slidable mount to slidably connect the frame to the at least one vertical guide; a horizontal mount (28) movably secured to the at least one horizontal guide and secured to a first end of the at least one vertical guide (Fig. 1); and a second end of the at least one vertical guide slidably secured to one of the upper horizontal member and the lower horizontal member of the base to permit the horizontal movement of the second end the at least one vertical guide along one of the upper horizontal member and the lower horizontal member. While Gibbs is silent as to exactly how the bracket (26) on the end of the vertical guides is disposed, one having ordinary skill in the art would recognize that the bracket may be cantilevered, or, in the event that a more rigid support is necessary, the bracket may be slidably attached to the base (claim 4);

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- the second end of the at least one vertical guide secured to a sliding element to slidably secure the second end of the at least one vertical guide to one of the upper horizontal member and the lower horizontal member of the chase, the sliding element securedly attached to the second end of the at least one vertical guide and slidably attached to one of the upper horizontal member and the lower horizontal member. While Gibbs is silent as to exactly how the bracket (26) on the end of the vertical guides is disposed, one having ordinary skill in the art would recognize that the bracket may be cantilevered, or, in the event that a more rigid support is necessary, the bracket may be slidably attached to the base (claim 5);
- a horizontal adjustment (claims 7 and 9);
- at least one of the vertical guides comprising a spirally threaded vertical guide (48) (claim 10);
- the spirally threaded vertical guide received in a vertical bore (50) of the vertical mount in a gearing relationship such that when the vertical spirally threaded rod is rotated the vertical mount moves along the vertical axis of the chase (claim 12);
- at least one of the at least one horizontal guides comprising a spirally threaded horizontal guide (54) (claim 17);
- the spirally threaded horizontal guide received in a horizontal bore (56) of the horizontal mount in a gearing relationship such that when the spirally threaded horizontal guide is rotated, the horizontal mount moves along the horizontal axis of the chase (claim 18);

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- at least one horizontal guide (30, 54) secured between the left vertical member (32) and the right vertical member (32); at least one vertical guide (22, 48) slidably secured (28) to permit movement of the vertical guide along the horizontal axis (claim 23);
- a frame (12) slidably secured to the base to allow the frame to slide along the horizontal axis of the base; and adjusting the position of the frame by sliding the frame along the horizontal axis (Fig. 1) (claim 24);
- a means (Fig. 1) for adjusting the frame in the horizontal axis (claim 25).

Regarding claims 1-5, 7, 9, 10, 12, 17, 18, and 23-25, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bolles by replacing the vertical movement means with the horizontal and vertical movement means of Gibbs, thereby allowing adjustment of the die frame in the horizontal axis of the chase, because Gibbs teaches that an apparatus that allows adjustment in both the vertical and horizontal axes is well known in the art, and one having ordinary skill in the art would recognize that the apparatus of Gibbs is an acceptable alternative to the apparatus of Bolles. Additionally, one having ordinary skill in the art would recognize that the apparatus of Gibbs would offer an additional degree of freedom of movement to allow more flexibility in the number of possible positions of the die frame within the chase.

11. Claims 11, 13, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bolles in view of Gibbs as applied to claims 1-5, 7, 9, 10, 12, 17, 18, and 23-25 above, and further in view of Posh, US 3,449,971.

The combination of Bolles and Gibbs substantially teaches all that is claimed as discussed in the rejection of claims 1-5, 7, 9, 10, 12, 17, 18, and 23-25 above, except:

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- a vertical fine adjustment, the vertical fine adjustment including a spur gear and a worm gear, the spur gear attached to the spirally threaded vertical guide and the worm gear meshing with the spur gear such that the spur gear rotates the spirally threaded vertical rod when the worm gear is rotated (claims 11 and 13);
- a fine horizontal adjustment, the fine horizontal adjustment including a spur gear attached to the spirally threaded horizontal guide, and a worm gear, with the worm gear meshing with the spur gear such that, when the worm gear is rotated, the spur gear rotates the spirally threaded horizontal guide to move the horizontal mount along the horizontal axis of the chase (claim 19).

Posh teaches a linear actuator (10) with a worm gear (32) meshing with a pair of spur gears (18, 20), such that when the worm gear is rotated, the spur gear rotates a spirally threaded shaft (12), to cause relative motion between the rod and the housing (14). Posh teaches that such an actuator is advantageous for very precise movements (col. 3, lines 30-32).

Regarding claims 11, 13, and 19, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Bolles to use an actuator with a worm gear and a spur gear and a shaft attached to the spur gear and movable when the worm gear is rotated, because Posh teaches that such an actuator is advantageous for generating very precise movements.

12. Claims 14-16 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bolles in view of Gibbs as applied to claims 1-5, 7, 9, 10, 12, 17, 18, and 23-25 above, and further in view of Gortner, US 6,598,868.

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The combination of Bolles and Gibbs substantially teaches all that is claimed as discussed in the rejection of claims 1-5, 7, 9, 10, 12, 17, 18, and 23-25 above, except:

- a coarse vertical (horizontal) adjustment, the coarse adjustment including a vertical (horizontal) actuator movably received within a vertical (horizontal) actuator receiving cavity in the vertical (horizontal) mount and having an at least partially threaded bore extending through the vertical (horizontal) actuator, the at least partially threaded bore including receiving threads and being coextensive with the vertical (horizontal) bore of the vertical (horizontal) mount, the at least partially threaded bore providing the gearing relationship with the spirally threaded vertical (horizontal) guide, and the at least partially threaded bore being sized to release the spirally threaded vertical (horizontal) guide when the vertical (horizontal) actuator is displaced relative to the vertical (horizontal) mount (claims 14 and 20);
- the receiving threads of the partially threaded bore biased in a gearing relationship with the spirally threaded vertical (horizontal) guide by a compressible element biased between a bottom surface of the vertical (horizontal) actuator and a bottom of the cavity in the vertical (horizontal) mount (claims 15 and 21);
- the compressible element comprising a coiled spring (claims 16 and 22).

Gortner teaches a method of coarsely adjusting a device on a threaded rod, including:

- a coarse adjustment, the coarse adjustment including an actuator (115) movably received within an actuator receiving cavity (117) in the mount (118) and having an at least partially threaded bore (122) extending through the actuator, the at least partially threaded

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bore including receiving threads (Figs. 17 and 18) and being coextensive with the bore of the mount, the at least partially threaded bore providing the gearing relationship with the spirally threaded guide (121), and the at least partially threaded bore being sized to release the spirally threaded guide when the actuator is displaced relative to the mount (claims 14 and 20);

- the receiving threads of the partially threaded bore biased in a gearing relationship with the spirally threaded guide by a compressible element (123) biased between a bottom surface of the actuator and a bottom of the cavity in the mount (claims 15 and 21);
- the compressible element comprising a coiled spring (123) (claims 16 and 22);
- That such an adjustment mechanism, when actuated, frees the mount for displacement along the length of the threaded rods (col. 2, lines 48-49).

Regarding claims 14-16 and 20-22, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Bolles to include an adjustment actuator as taught by Gortner, because Gortner teaches that such an actuator mechanism is advantageous for freeing a mount for displacement along the length of a threaded rod, and that such a mechanism is well known in the art, and one having ordinary skill in the art would recognize that such a mechanisms is a suitable alternative to the actuating mechanism of Bolles.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wilson et al., US 724,530, Buzza, US 1,763,090, Snedden, US 1,885,958, and Drobis,

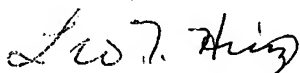
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US 2,785,629 each teach chases with mechanisms for adjusting type having obvious similarities to the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo T. Hinze whose telephone number is (703) 305-3339. The examiner can normally be reached on M-F 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (703) 305-6619. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-0952.



Leo T. Hinze
Patent Examiner
AU 2854
15 August, 2003



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